



Focus on **2005 Governor's Award**

from Ecology's Hazardous Waste and Toxics Reduction Program

2005 Governor's Award for Pollution Prevention and Sustainable Practices

Winners lead the way

Gov. Christine Gregoire has honored five Washington facilities with the 2005 Governor's Award for Pollution Prevention and Sustainable Practices.

The winners invested in innovative ways to offer their services and products while avoiding the use of toxic materials, minimizing waste, and conserving energy, water and other resources. They reduced material and disposal costs, increased product quality, and improved worker health and safety.

Why they won

The winners showed there are benefits to reducing or eliminating the use of toxic materials, preventing solid and hazardous waste, reducing polluted emissions to the air and discharges to the water, and making efficient use of natural resources. They demonstrated excellence and leadership through their commitment to environmental quality and their willingness to share their knowledge of pollution prevention and sustainable practices. Sustainable practices allow a facility to meet its needs, without using so many resources as to jeopardize the ability of future generations to meet their own needs.

The judging process

Ecology staff members first review applicants for this award. Finalists proceed to an external panel of judges – past winners, pollution-prevention experts, and representatives from business, labor and environmental groups, and academia.

2005 Governor's Award recipients

Ball Metal Beverage Container Corporation in Kent made over 1 billion aluminum beverage cans in 2004. The company has had outstanding success in finding ways to avoid using toxic materials and reducing their use of water. The award also recognizes the company's efficient use of resources and commitment to environmental protection.

Ball uses an Environmental Management System to find the best ways to make cans while protecting worker health and safety, as well as the health of the environment. Since 1998, this effort saved the plant several million dollars. Management and workers focused on waste reduction in recent years and cut the spoilage rate by 40 percent or 510,000 pounds of aluminum each year. Coating use dropped by 40,000 gallons, lubricant use dropped by 8,000 gallons, and hydraulic oil use dropped by 18,000 gallons per year.

The can washing line saves 5 million gallons of fresh water each year using a counter-current process. Less water means less wastewater. That also reduced the amount of lime and sulfuric acid needed to treat the water. In the past, the company cleaned some of the equipment and parts with methyl-ethyl-ketone or MEK. MEK is highly flammable and can contribute to air pollution. Now that same cleaning is done with water-based cleaners.

Columbia Lighting, of Spokane, makes commercial, industrial and decorative fluorescent lighting. The company has successfully reduced its use of toxics chemicals and fresh water, and significantly trimmed wastewater and air emissions.

The facility converted to powder coating from solvent paint. This change, plus moving to high volume/low pressure spray guns, cut paint use by 200,000 pounds per year. And air emissions are down by 275,000 pounds per year. Installing a closed-loop chiller cut fresh-water use by approximately 300,000 gallons each month. A systems audit of the air compressors and air plumbing led Columbia Lighting to fix leaks and eliminate extraneous equipment, so the company now uses 31 percent less natural gas and nine percent less electricity.

By installing new water valves and using water more precisely in manufacturing, the company cut wastewater from 18.3 million gallons in 2001 to 5.4 million gallons in 2003. The system constantly monitors the wastewater and stops the flow to the sewer if the pH level goes out of acceptable range. If there is a problem, the system can hold a full day's flow of wastewater, which allows production to continue while the problem is found and fixed.

Meridian Collision Center of Puyallup is an auto-body repair and fire-apparatus-service center with a strong commitment to good environmental management. The shop has reduced the use of toxic materials, "greened" the supply chain and educated its employees and customers about environmental stewardship.

As one judge put it, Meridian is "a good example of a little guy doing a lot." The company reduced paint use by 35 percent with a new paint system that mixes just enough paint for the job. Hazardous waste was cut to just 24 ounces of solvent each week. Leftover paint is donated to Clover Park Technical College and to local artists.

Meridian buys products from local suppliers recognized as good environmental performers. It buys as many good quality recycled parts as possible. The shop recycles damaged vehicle body parts and wheels and found a vendor to repair and recycle bumper covers. The power bill dropped 25 percent after the shop switched to a new, more efficient compressor and replaced old fluorescent lights with energy-efficient, low-mercury bulbs.

It is important to Meridian's management that all employees adopt a positive environmental ethic, and that recycling and environmental-stewardship concepts are shared with customers.

Totem Ocean Trailer Express (TOTE) runs a regular transport service between Tacoma and Anchorage, Alaska. The company has reduced its use of toxic chemicals and fuel. It protects the marine environment and supports local communities.

TOTE's U.S.-built ships are designed to carry more cargo, use less fuel and provide greater environmental protection than the company's previous vessels. The more efficient diesel-electric motors reduced fuel use by 30 percent, or 5,000 less barrels per week.

The ships have redundant rudder steering systems, redundant monitors and alarms on the fuel tanks, and extra spill-equipment lockers. Two of the engines can be worked on while the ship is underway without threatening the integrity of the power plant.

The ships also have an internal fresh water ballast system so they do not have to take on or discharge seawater for ballast. This avoids introducing invasive species to local waters. They have desalinization plants, so reclaimed salt water is used for all fresh water purposes on board. The ships have state-of-the-art sewage treatment plants and use only biodegradable soap, detergents and degreasers on board.

On their return trips to the U.S., the TOTE ships carry recyclables for processing, electronic waste for proper disposal and used clothing, all for free. The Alaska recycling organization values the recyclables transport alone at more than \$1 million each year.

The **University of Washington Medical Center** is a 450-bed healthcare facility in Seattle that also serves as a regional specialized-medicine center for Alaska, Washington, Idaho, Montana and Wyoming. The facility avoids the use of toxic materials, especially mercury. It also conserves water, reduces waste, and provides charity care.

The Medical Center has virtually eliminated its use of mercury and switched to a less toxic chemical for cold-chemical disinfection. It has cut water use by 28 million gallons per year. The bulk of this reduction comes from installing a closed-loop laundry system and allowing patients to opt out of daily linen changes. The center also changed to a floor-mopping system that will cut disinfectant water use by 80 percent, from 750 gallons to three gallons per custodian per day. By retrofitting and replacing older equipment, the center cut electricity use by 3 million kilowatt hours per year. Regulated medical waste fell from 950,000 pounds in 2002 to 664,570 pounds in 2004. Operating room waste dropped by 27 percent. These reductions came from careful training and designing better processes.

The processes and procedures used by the Medical Center are watched and emulated by other area healthcare facilities. In addition, the Medical Center's purchasing system is designed to make sure all supplies, services and technology support both high-quality patient care and environmental protection. In 2004, the Medical Center provided more than \$23 million in charity care for the regional community.

For more information

Contact Mariann Cook Andrews of the Department of Ecology's hazardous-waste program, 360-407-6740, or visit the Governor's Award Web site at: www.ecy.wa.gov/sustainability/govaward/gov_awards.htm

If you need this information in an alternate format, please contact Ecology's Hazardous Waste and Toxics Reduction Program at 360-407-6700 (voice). If you are a person with a speech or hearing impairment, call 711 or 1-800-833-6388 for TTY.